

# **Prevention of Significant Air Quality Deterioration Review**

## **Final Determination**

June 2008

Facility Name: Houston American Cement Company

City: Perry

County: Houston

AIRS Number: 04-13-153-00056

Application Number: 17509

Date Application Received: July 2, 2007



State of Georgia  
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## BACKGROUND

On July 2, 2007 Houston American Cement Plant (hereafter ‘HAC’’) submitted an application for an air quality permit to construct and operate a new/greenfield Portland cement manufacturing plant. The facility is located at 319 A. E. Harris Road in Perry, Houston County. The proposed project will consist mainly of an on-site limestone and clay quarry, raw material handling and storage, kiln feed preparation with an in-line raw mill, a dry process rotary kiln coupled with a preheater/precalciner and a calciner, a clinker cooler, a coal mill, a finish mill, and cement packaging, storage and shipping operations.

On March 10, 2008, the Division issued a Preliminary Determination stating that the construction of the new Portland cement plant as described in Application No. 17509 should be approved. The Preliminary Determination contained a draft Air Quality Permit for the construction and operation of the cement plant.

The Division requested that HAC place a public notice in a newspaper of general circulation in the area of the existing facility notifying the public of the proposed construction and providing the opportunity for written public comment. Such public notice was placed in *Houston Home Journal* (legal organ for Houston County) on March 12, 2008. The public comment period expired on April 10, 2008.

During the comment period, comments were received from U.S EPA Region 4.

A copy of the final permit is included in Appendix A. A copy of written comments received during the public comment period is provided in Appendix B. Appendix C includes certain related documents received either before or after the public comment period.

### **U.S. EPA REGION 4 COMMENTS**

Comments were received from Gregg M. Worley, Chief of Air Permits Section, U.S. EPA Region 4, by letter on April 10, 2008. The comments are copied and pasted from a scanned electronic image file of the April 10, 2008 letter (generated and sent by U.S. EPA Region 4), and were the result of reviews by James W. Little of U.S. EPA Region 4.

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#### **Comment 1. SO<sub>2</sub> Emissions Limits**

The kiln system SO<sub>2</sub> emissions limits are 1.0 pounds per ton of clinker and 125.0 pounds per hour, with both limits having a 30-day compliance averaging period. We understand that these 30-day limits take into account the higher emissions that can occur when the raw mill is off (although GEPA does not show in the preliminary determination any calculations indicating the effect of the raw mill off condition). However, our additional understanding is that the raw mill could be off more than 24 hours at a time so that maximum 24-hour SO<sub>2</sub> emissions could be considerably higher than the 30-day limits. Given this possibility and the fact that the relevant comparison ambient concentrations for SO<sub>2</sub> include 3-hour and 24-hour concentrations, we recommend that GEPA include short-term (3-hour and/or 24-hour) SO<sub>2</sub> limits in the final permit in addition to 30-day limits. (Also see comment under "Air Quality Modeling Comments" below.)

#### **EPD Response**

After reviewing the results of ambient impact modeling conducted by EPD and HAC, EPD concludes that the predicted short-term ambient impacts of SO<sub>2</sub> and CO are substantially below the NAAQS, and therefore the short-term emission fluctuations during the normal production will hardly cause any exceedance of the NAAQS.

HAC proposes to use a hydrated lime injection system as necessary to minimize any SO<sub>2</sub> emission surges during normal production cycles, including input of raw materials with elevated sulfur contents or shutdown of the raw mill. This add-on control device will be turned on and off by a computerized system, which compares constantly a preset value with emission reading/data from a SO<sub>2</sub> CEM. Therefore, the adverse impact of a not running raw mill on the SO<sub>2</sub> emissions is expected to be minimal.

Consequently, the proposed 30-day limits for both SO<sub>2</sub> and CO are expected to adequately protect the NAAQS and PSD increments. EPA did not present any evidences to the contrary. Therefore no short term limits for these pollutants are necessary.

**Comment 2. BACT for NO<sub>x</sub> Emissions from Kiln System**

The proposed BACT emissions limit for NO<sub>x</sub> emissions from the kiln system is 1.95 pounds per ton of clinker (30-day average) based on use of SNCR and other NO<sub>x</sub>-limiting methods. Although this limit is not inconsistent with other recent Portland cement BACT determinations, recent information we have reviewed indicates that even lower NO<sub>x</sub> emissions rates on the order of 1.25 pounds per ton of clinker could be achieved for a new kiln system. We request that GEPC give further consideration to the NO<sub>x</sub> BACT limit before issuing a final permit.

**EPD Response**

Based on conversation with EPA Region 4, EPD understands that the “recent information” mentioned in the comment is a revised NSPS standard for Portland cement plants (40 CFR, Part 60, Subpart F) to be proposed by EPA. In an e-mail immediately following the comments, EPA mentions that this revised NSPS standard may establish a NO<sub>x</sub> emissions standard higher than 1.25 lb/ton clinker but still less than the 1.95 lb/ton clinker proposed as BACT limit for HAC.

EPA proposed the revised NSPS for Portland cement plants on May 30, 2008 on the Worldwide Web (WWW) through the Technology Transfer Network (TTN) of EPA. Once the revised NSPS is published by *Federal Register*, EPA will take public comment on the proposed rule for 60 days from its publication, and will hold a public hearing if requested. Therefore, EPD considers it is premature at the moment to revisit the proposed NO<sub>x</sub> BACT limit based on the proposed rule. Based on the fact that HAC’s cement kiln, including associated NO<sub>x</sub> control devices, is very similar in design and size, if not identical, to some of the cement kilns currently operated by HAC’s sister plants and other cement companies in Florida and other states, EPD concludes that it is appropriate to apply the most common NO<sub>x</sub> BACT limit among those sources to HAC, i.e., 1.95 pounds of NO<sub>x</sub> per ton of clinker. Since HAC’s raw materials quarried locally may contain more nitrogen-rich compounds than those available in Florida, as in the case of sulfur, the proposed NO<sub>x</sub> BACT limit could be more “stringent” to HAC than the other cement plants.

**Comment 3. Compliance Averaging Period for Kiln System CO Emission Limits**

The compliance averaging period in the draft permit for CO emissions for the kiln system is a 30-day averaging period. In general, permit compliance averaging periods should match the averaging periods used in ambient impact modeling evaluations. Since short-term modeling was performed for CO, we recommend that GEPD give consideration to including a short-term CO limit in the final permit in addition to a 30-day limit.

**EPD Response**

EPD agrees with EPA's comment that "in general, permit compliance averaging periods should match the averaging periods used in ambient impact modeling evaluations." But EPD notices that this is not a requirement under NSR regulations. Since the maximum short-term ambient impacts of CO and other criteria pollutants from HAC are substantially below the corresponding significant impact levels (SIL) and/or NAAQS, exceedances of such NAAQS become highly unlikely as HAC's cement kiln, including associated emission control systems, will be controlled by sophisticated computerized production and emissions control systems. Designed to maintain the production at optimized conditions and emissions at minimized rates, such automated control systems will be able to maintain the CO emissions close to the minimal level as designed to avoid extra fuel consumption (an high level of CO emissions would mean less completeness of fuel combustion in the kiln, i.e. low fuel efficiency). Since there is little chance for the short-term CO emissions to surge above the modeled level, no short-term CO limits are necessary.

**Comment 4. Fine Particles**

In the preliminary determination, GEPD does not list PM<sub>2.5</sub> as a pollutant that will be emitted from the proposed cement plant. PM<sub>2.5</sub> is a regulated NSR pollutant that will be emitted and should be acknowledged as such in the final determination. At GEPD's discretion, GEPD could state that it is following EPA's current guidance to accept use of PM<sub>10</sub> as a surrogate for PM<sub>2.5</sub> until final PM<sub>2.5</sub> NSR implementation rules are adopted.

**EPD Response**

EPD agrees with EPA's comment, and approves HAC's revised Modeling Report, and states hereby that PM<sub>10</sub> has been used as a surrogate for PM<sub>2.5</sub> in NAAQS compliance determination, following the current EPA guidance until PM<sub>2.5</sub> NSR implementation rules are adopted.

**Comment 5. Mercury Listing**

On page 1 of the preliminary determination, GEPD lists regulated NSR pollutants and the significant emissions increase levels for these pollutants. One of the pollutants listed is mercury with a significance level of 0.1 tpy. Since mercury is not a regulated NSR pollutant, we believe this listing is simply an oversight.

**EPD Response**

EPD agrees with EPA's comment. In addition, the rule citation of Condition 2.2.6, which limits the plant-wide annual mercury emissions has been corrected accordingly as follows:

2.2.6 The Permittee shall not discharge, or cause the discharge, into the atmosphere from the entire Portland cement plant at this site, total mass of mercury compounds (expressed as Hg) in amounts exceeding 118 pounds during any period of 12 consecutive months.  
[40 CFR 52.21—PSD/BACT Review 391-3-1-.03(2)(c)]

**Comment 6. Specific Conditions in Draft Permit**

- a. In Section 1.1.1, the "Overall Facility Process Description" section of the draft permit (on page 3), GEPD states that the "hydrated lime injection system is used as necessary to comply with SO<sub>2</sub> emissions limits." It seems to us that the "as necessary" provision adds additional complication to the plant operating system and encourages the source owner/operator to operate as close to the SO<sub>2</sub> emissions limits as possible without exceeding them. A much simpler and more environmentally protective requirement would be for GEPD to require continuous use of hydrated lime injection.

**EPD Response to Comment 6a.**

The use of the hydrated lime injection system has its limit as the effectiveness of the system diminishes as the concentration of SO<sub>2</sub> in the flue gas stream becomes lower.<sup>1</sup> Therefore, the system can only be used effectively to reduce short-term SO<sub>2</sub> spikes above certain level. For the rest of the time, the SO<sub>2</sub> emission control depends on the combined adsorption of SO<sub>2</sub> by raw feed/meal in preheater/precalciner, calciner, kiln and running raw mill, which constitutes continuous control of the SO<sub>2</sub> emissions. The requirement for the use as necessary of the hydrated lime injection system, which will be turned on and off by the computerized control system fed by instant SO<sub>2</sub> CEM readings, is the same as required for its sister plant and other plants in Florida and other states. In fact, it is not for the best interest of HAC to operate the kiln as close to the SO<sub>2</sub> emission limit as possible without exceeding them, because such practice will

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<sup>1</sup> M. Deussner (Heidelberg cement Group), Current Status of SO<sub>2</sub> Reduction in the Cement Industry, VDS Congress, Dusseldorf, Germany, 2002.

certainly make long-term data averaging (30-day rolling average) less effective, and thus increase the chance of exceedance of the relevant emission limits.

- b. The purpose of the “Facility Wide Emission Caps” in Conditions 2.2.1 to 2.2.6 is not clear to us. We recommend that an explanation of the need for these caps be included in the final determination.

EPD Response to Comment 6b.

The rationales for the plant-wide annual emission limits of VOC, SO<sub>2</sub>, NO<sub>x</sub>, CO, PM/PM<sub>10</sub> are: (1) Appeared first in the PSD permit, these limits highlight straightforward the magnitude of the source using in the same mass unit as in NSR regulations, allowing people to grasp the nature of the source at once. Any future emission increases above these limits (which are modeled) shall be scrutinized for NSR applicability. (2) These limits require record keeping of annual emissions of the pollutants, making the emission tracking and compliance demonstration easier; (3) The recorded annual emission data can be ready for emission fee calculations.

The plant-wide annual emission limit/cap for mercury allows the track/record keeping of mercury emissions and mercury contents in the raw materials, and keeps the mercury emissions in check. Consequently, it provides additional assurance for HAC to comply with the MACT mercury emission limit in Condition 3.3.4 of the draft permit.

- c. In Condition 3.2.3 (last paragraph), GEPD includes the following requirement: “The Permittee shall submit a SIP Air Permit application for the authorization of use of any new fuel(s) which may have an adverse impact(s) on the emissions of any regulated air pollutants.” We recommend that GEPD strike the last part of the sentence starting with “which may have,” and simply require the Permittee to submit an application for authorization to use any new fuel.

EPD Response Comment 6c.

The entire last paragraph of the Condition 3.2.3 has been eliminated because EPA’s comment has already been addressed by Conditions 2.1.3, 2.1.4, 2.1.10, and/or the first paragraph of Condition 3.3.2 respectively.

- 3.2.3 The Permittee shall only burn authorized fuels whose impacts on air pollutant emissions from the in-line kiln/raw mill have been determined as acceptable based on a Division-approved fuel-specific performance test(s) required by Condition 4.2.22. Authorized fuels may include, but not to be limited to, coal, fuel oil, natural gas, petroleum coke, landfill gas, on-specification used oil, and other non-hazardous wastes as defined in 40 CFR Part 63, Subpart EEE – “National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors”. The Permittee shall demonstrate compliance with the usage requirements for any of the above or combination of the above authorized fuels

with the Division before using the fuel in the in-line kiln/raw mill in accordance with the following procedures/requirements:

- a. Firing of an authorized non-hazardous liquid fuel shall not exceed the percentage of the total heat input of the in-line kiln/raw mill that was utilized during the most recent Division-approved performance test for firing the liquid fuel.
- b. Firing of an authorized non-hazardous solid fuel shall not exceed the percentage of the calciner/kiln burner capacity that was utilized during the most recent Division-approved performance test for firing the solid fuel.
- c. Total solid fuel usage including coal, petroleum coke and other non-hazardous alternative solid fuels shall not exceed 205,618 tons during any 12 consecutive month period.
- d. Dry coal/fly ash may be injected directly into the calciner or kiln.
- e. The air heater supplying hot air to the raw mill shall be fired only with natural gas, landfill gas or distillate fuel oil (No. 1 and No. 2) and No. 4 fuel oil.
- f. The firing of the “on-specification” used oil fuel shall not exceed 2,000 gallons per hour and 3,000,000 gallons during any consecutive 12 month period. The “on-specification” used oil fuel shall meet the following specifications:
  - i. Arsenic shall not exceed 5.0 ppm
  - ii. Cadmium shall not exceed 2.0 ppm
  - iii. Chromium shall not exceed 10.0 ppm
  - iv. Lead shall not exceed 100.0 ppm
  - v. Total halogens shall not exceed 1000 ppm; and
  - vi. Flash point shall not be less than 100°F.

“On-specification” used oil fuel may be generated from on site sources or purchased from a vendor, and shall not contain any PCB’s.

~~The Permittee shall submit a SIP Air Permit application for the authorization of use of any new fuel(s) which may have an adverse impact(s) on the emissions of any regulated air pollutants. Prior to the initial Division-approved fuel-specific performance test, the Permittee shall only fire coal, fuel oil, natural gas, and/or petroleum coke.~~



- d. The compliance averaging times for SO<sub>2</sub> and CO kiln system emissions limits in Condition 3.3.1 are 30-day rolling averages. Having only long-term (30-day) limits is not consistent with the short-term emissions rates used for modeling evaluations. (See comments elsewhere on this point.)

EPD Response to Comment 6d.

See EPD's responses to EPA's comments on **SO<sub>2</sub> Emissions Limits** (Comment 1) and **Compliance Averaging Period for Kiln System CO Emission Limits** (Comment 3).

**Comment 7. Air Quality Modeling Comments**

The only PSD permit application document in our file on this project is the original July 2, 2007, application. Our review of the air quality impact modeling portion of this application (Appendix D- Air Quality Modeling Report) was performed and documented in our November 7, 2007, memorandum to GEPD. These review comments were discussed with GEPD on November 21, 2007.

We recently received an updated (February 2008) Air Quality Modeling Report and an e-mail containing specific responses to our November 2007 comments. The revised modeling appears to have corrected some of the modeling errors identified by GEPD and used the correct highest second-high concentrations for the evaluation of PM<sub>10</sub> PSD 24-hour increment. This revised modeling report did not address the other items identified in our November 7, 2007, memorandum. Note that the modeling files associated with the revised modeling report were not available for our review.

Based on our review of the revised February 2008 modeling report and the provided responses to our original comments, the following items remain outstanding and should be addressed to provide a complete permitting record.

- a. Short-Term Emission Rates - The proposed emissions limits for SO<sub>2</sub> and CO in the draft permit are for 30-day periods. SO<sub>2</sub> and CO modeling, however, was performed for short-term periods of 24 hours and less. For assurance that short-term modeling results are representative of allowable operating conditions, the final permit should contain emissions rates and compliance averaging periods that are equivalent to those modeled. For example, in addition to an SO<sub>2</sub> emissions limit with a 30-day average, the final permit should include an SO<sub>2</sub> emissions limit with a short-term compliance period and a rate equivalent to the periods and rate modeled to demonstrate compliance with short-term ambient concentration limits.

EPD Response Comment 7.

On April 10, 2008 EPA Region 4 submitted a letter with several comments on the Preliminary Determination and Draft PSD Permit for the Houston American Cement (HAC) project in Houston County, Georgia. HAC addressed those comments providing additional information on a revised modeling report and a letter submitted on May 9, 2008.

The following are Data and Modeling Unit's item-by-item responses to both EPA's comments and HAC's additional information pertaining to modeling issues. See HAC's letter for the original EPA comments.

EPD Response to Comment 7a.

The basis for the modeled emission rates in g/sec was the 24-hour rate, which was derived from the maximum daily throughput. This was also the basis for the annual period modeled concentrations. For the short-term periods (1, 3 and 8 hours), the 24-hour rate was increased by 10% and converted to g/sec for modeling. The predicted concentrations of SO<sub>2</sub> and CO were below the corresponding significance levels for all averaging periods and therefore there was no need for full impact analyses. The decision to include in the permit emission limits equivalent to those that were modeled corresponds to the Stationary Source Permitting Program (SSPP).

- b. Fugitive PM Emissions - Table A-6 in the July 2006 permit application provides annual (tpy) and hourly (lb/hr) emission rates that appear to be calculated based on the annual and hourly rate of material throughput provided in this table. Because the annual emission rate derived from the annual throughput in this table is much smaller than the hourly rate derived from the provided larger hourly throughputs, the maximum hourly rates should have been used in the 24-hour impact modeling. This appears not to have been done in the compliance modeling.

EPD Response to Comment 7b.

As previously explained, the basis for the modeled emission rates in g/sec was the 24-hour rate, which was derived from the maximum daily throughput. Annual concentrations were modeled with annual emission rates derived from the 24 hour rate. This was verified during the modeling review process.

- c. Meteorological Data Representativeness - Only general statements are provided concerning the representativeness of the Macon airport meteorological data for application at the plant site. These general statements need to be supported by specific analyses of the surface characteristics. The directional dependent surface characteristics of both the project and airport sites should be provided to demonstrate the representativeness of the Macon meteorological data for application at the project location.

EPD Response to Comment 7c.

The analysis provided by HAC is incorrect since the comparison between the surface characteristics of both sites should have been based on air photos of a 3 km area surrounding the sites in accordance with the previous guidance, which was used at the time of processing the meteorological data provided by GA EPD to HAC. Instead the analysis was based on AERSURFACE which calculates surface parameters based on different areas.

The meteorological data representativeness analysis was redone by GA EPD using air photos of a 3 km area surrounding both Macon Airport and HAC's site. The areas were divided in four sectors for which Albedo, Bowen Ratio, and Surface Roughness were assessed. Results are summarized in the following table:

<b>Surface Characteristic</b>	<b>Macon Airport</b>	<b>HAC</b>
Albedo	Vegetative cover except for airport runway and nearby buildings. Albedo value within the range of 0.1 – 0.2	Vegetative cover except for proposed (HAC) and existing (CEMEX) industrial areas. Albedo value within the range of 0.1 – 0.2
Bowen Ratio	Good surface run-off with no standing water. Bowen ratio value of approximately 1.	Good surface run-off with very little standing water. Bowen ratio value of approximately 1.
Surface Roughness	Buildings and trees are at an average height of 30 feet except for the runway area. Surface roughness within a range of 1 – 10.	Trees are at an average height of 30 feet except for the industrial areas. Surface roughness within a range of 1 – 10. The main stack height is high enough to offset the effect of surface roughness on emissions.

- d. Inventory of Other Emission Sources - The sources identified for consideration in the cumulative modeling and those eliminated, along with their emission parameters, should be provided for review and evaluation. This information should be provided for both the NAAQS and the PSD emission inventories of other sources. The basis for the emission rates in these inventories should be provided (i.e., allowable, potential, actual, etc.).

EPD Response to Comment 7d.

Attachment 2 is the revised modeling report contains the procedure for developing the Class II PSD and NAAQS emissions inventory which has been reviewed by DMU.

- e. Class II Visibility Assessment - The application contains only the results from a Class II visibility assessment without supporting quantitative demonstration. The PSD application should have included sufficient information to allow public review and evaluation of the conclusions provided. Although the GEPD preliminary determination contains the detailed procedure used in this assessment, the supporting quantitative assessment has not been provided for review and evaluation.

EPD Response to Comment 7e.

There were no sensitive receptors located within the significant impact area, and therefore, no Class II visibility assessment was required.

The following comments related to the discussions in GEPD's preliminary determination.

- f. Sulfur Dioxide Modeling - In the modeling section of the preliminary determination, GEPD indicates that the proposed project will have an insignificant impact for SO<sub>2</sub> considering all three averaging periods of interest: 3-hour, 24-hour, and annual. However, the modeling did not include the higher short-term emissions that can occur during the raw mill off operating condition. Since the raw mill off condition can occur for longer than 24 hours at a time, the maximum emissions during this condition should have been modeled for assessment of 3-hour and 24-hour concentrations. To ensure that the modeling analysis reflects future plant operations, the emissions rates actually modeled for 3-hour and 24-hour concentrations can be added to the permit as short-term emissions limits.

EPD response to Comment 7f.

As previously explained in items 1 and 2, the basis for the modeled emission rates for all pollutants in g/sec was the 24-hour rate, which was derived from the maximum daily throughput. Annual concentrations were modeled with annual emission rates derived from the 24 hour rate, and 3 hour concentrations were modeled with emission rates derived from the 24 hour rate increased by 10%. All this was verified during the modeling review process.

- g. Fine Particle Impacts - As previously discussed, the preliminary determination does not identify PM<sub>2.5</sub> as a regulated NSR pollutant. GEPD's rationale for expecting compliance with the PM<sub>2.5</sub> NAAQS should be addressed in the final determination.

EPD Response to Comment 7g.

PM10 was assessed as a surrogate for PM<sub>2.5</sub>. This issue was addressed in page 5-5 of the revised modeling report.

- h. Ozone Impacts - The impact of VOC emissions on ambient levels of ozone were addressed. One of the reasons given for the expected small VOC impact on ambient ozone levels is the fact that the southeast is NO<sub>x</sub> limited with respect to ozone formation. Because of the large NO<sub>x</sub> emissions from the proposed project, the final determination should include some discussion of NO<sub>x</sub> emissions impact on ambient ozone levels.

EPD Response to Comment 7h.

This issue has been correctly addressed on page 5-18 of the revised modeling report and on the response letter to EPA's comments.

- i. Significant Impact Level - Significant impacts include modeled concentrations *equal to* or greater than the significant impact levels. The preliminary determination states that the concentration must be greater than the SIL in order to have a significant impact area. Rather, the SIL's are the minimum amount of ambient impact considered significant.

EPD Response to Comment 7i.

In the modeling report, significant impacts were considered those concentrations equal to or greater than the significant impact levels (SIL). The statement in the preliminary determination, saying that significant impacts are those concentrations greater than the SIL, needs to be corrected.

- j. Appendix C: PSD Dispersion Modeling and Air Toxics Assessment Review - This appendix was not provided with the preliminary determination and was not available on GEPA's Web site. Therefore, it could not be included in our review.

EPD Response to Comment 7j.

The air toxics assessment review was included in the original application and modeling report reviewed by DMU, and it has been included in the revised modeling report (page 5-6).

- k. Modeled PSD Class II SIL Analyses - The maximum PM<sub>10</sub> ambient concentrations associated with project emissions provided in the preliminary determination (Table 6-4) do not agree with those provided in the February 2008 Air Quality Modeling Report. The bases for the reported values in the preliminary determination and in the February 2008 report were not available for review and evaluation.

EPD Response to Comment 7k.

This issue has been correctly explained by HAC on their response letter to EPA's comments.

- l. Additional Impact Assessment - The following comments are associated with the section addressing additional impacts.
- Growth - The reason(s) minimal project associated growth impacts are expected should be provided in the final determination.
  - Class II Area Visibility Impacts - (1) The VISCREEN modeling analyses provided in the preliminary determination is different from those provided in the February 2008 revised Air Quality Modeling Report. The bases for the reported values were not available for review and evaluation. (b) The plume visibility target delta E and Contrast values are appropriate for both PSD Class I and Class II areas as these are thresholds of perceptibility to untrained observers. The preliminary determination indicates their applicability only to Class I areas. (c) There are confusing reasons given to discount any plume visibility concerns. Because this is a proposed new greenfield cement plant, the comment that decreases in actual visibility-affecting PSD Class II emissions at the proposed cement plant far exceeds any corresponding increases in potential emissions is confusing. The statement that the lack of past visible plumes from this facility is justification to expect none in the future is not appropriate for a new plant.

EPD Response to Comment 7l.

This issue has been correctly addressed in the revised modeling report.

**HAC COMMENTS**

Comments were not received from HAC during the 30-day Public Comment period.

**COMMENTS FROM GENERAL PUBLIC**

Comments were not received from general public during the 30-day Public Comment period.



**EPD CHANGES**

EPD made no changes outside the scope of facility, EPA, and/or general public comments.

## **APPENDIX A**

### **AIR QUALITY PERMIT**

**No. 3241-153-0056-P-01-0**

## **APPENDIX B**

### **WRITTEN COMMENTS RECEIVED DURING COMMENT PERIOD**

## **APPENDIX C**

### **OTHER RELATED DOCUMENTS RECEIVED BEFORE OR AFTER THE COMMENT PERIOD**